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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

SCHECHTER, ANDREW M

ART UNIT PAPER NUMBER

2871

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10/09/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

09/848,642

Applicant(s)

YAMAZAKI ET AL.

Examiner

Andrew Schechter

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 21-24, 76, 77 and 85-100 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 21-24, 76, 77 and 85-100 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Request for Continued Examination***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 24 July 2007 has been entered.

### ***Response to Arguments***

2. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

The applicant argues that *Yamazaki et al.*, U.S. Patent No. 7,023,021, is not prior art in view of the submission of the certified translation of the applicant's foreign priority document. The examiner agrees, and withdraws the prior art rejections over *Yamazaki*.

### ***Double Patenting – Non-Statutory***

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140

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F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 21-24, 76, 77, 85-90, 93, 94, 97, and 98 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 or 9, and 2, 4, and 6, of U.S. Patent No. 7,023,021 in view of *Yokomizu, Nagayama, Kanemoto, and Yoneya* as applied below.

The patented claim 1 recites the electrode structure of claim 21, while the details of the overlapping colored layers and organic resin film would have been obvious to one of ordinary skill in the art at the time of the invention in view *Yokomizu, Nagayama, Kanemoto, and Yoneya* as discussed below under 35 USC 103. Claim 21 is therefore rejected. Use in a portable telephone would have been obvious to one of ordinary skill in the art at the time of the invention, so claim 76 is also rejected. The additional limitations of claims 22-24, 77, 93, 94, 97, and 98 are met by those references or obvious to one of ordinary skill in the art at the time of the invention over them. The additional limitations of claims 85-90 would have been obvious to one of ordinary skill in the art at the time of the invention or are disclosed by dependent patented claims 2, 4, and 6.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 91, 92, 95, 96, 99, and 100 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Yokomizu*, Japanese Patent Document No. 10-073813 in view of *Nagayama et al.*, U.S. Patent No. 5,680,187, and further in view of *Kanemoto et al.*, U.S. Patent No. 5,493,429 and *Yoneya et al.*, U.S. Patent No. 6,300,926.

*Yokomizu* discloses [see Figs. 1 and 2, for instance] an electro-optical device comprising a first substrate [10], a thin film transistor [paragraph 0017] formed over the first substrate, a pixel electrode [13] comprising a first transparent conductive film [paragraph 0018], and electrically connected to the TFT, a second substrate [20] opposed to the first substrate, at least a first colored layer [21B] and a second colored layer [21R] formed on the second substrate wherein the first and second colored layers partly overlap each other to form a light shielding portion [21BM]; an organic resin film [22, paragraph 0021] covering said first and second colored layers and said light shielding portion, an opposing electrode [23] comprising a second transparent conductive film [paragraph 0021], and a liquid crystal [30] interposed between the pixel electrode and the opposing electrode, wherein the organic resin film is interposed

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between the liquid crystal and the first and second colored layers, and wherein the opposing electrode is interposed between the liquid crystal and the organic resin film.

*Yokomizu* does not explicitly disclose the light shielding portion overlapping at least a channel formation region of the TFT, though they are shown to overlap the switching elements generally, and TFTs inherently have channel regions.

*Nagayama* discloses using TFTs with channel regions as the switching elements and having the analogous light shielding portions overlap them [see Fig. 1]. It would have been obvious to one of ordinary skill in the art to do so, motivated by *Nagayama's* teachings that "using TFTs as switching elements has recently become widely used" [col. 1, lines 28-29], that "the TFT ... comprises a semiconductor layer (a layer in which a channel is formed)" [col. 7, lines 64-65], and that by using a light shield overlapping the active elements "the malfunction of the active elements due to external light can be prevented" [col. 6, lines 1-3].

*Yokomizu* also does not disclose that the organic resin film has a thickness of 1  $\mu\text{m}$  or more; the reference appears to be silent on the thickness of the organic resin film. *Kanemoto* discloses [see Fig. 1] analogous overlapping color filters, and discloses that the thickness increase where they overlap is 1-2  $\mu\text{m}$  [col. 3, lines 34-36]. *Yoneya* teaches [col. 17, line 65 – col. 18, line 5] that a function of the organic resin film (overcoat layer) is "to flatten a difference in level due to the color filter and the light-shielding film". It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to make the thickness of the organic resin film large enough to flatten (or at least moderate) a 1-2  $\mu\text{m}$  bump. Doing so requires a thickness of about 1

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$\mu\text{m}$  or more, which overlaps the recited range of 1  $\mu\text{m}$  or more; in such cases a *pima facie* case of obviousness exist [see MPEP 2144.05].

Claim 91 is therefore unpatentable.

Regarding the additional limitation of claim 92, that there is a third colored layer in the overlap stack, *Yokomizu* discloses that all three color filters can be stacked to form 21BM [paragraph 0020, for instance], so claim 92 is also unpatentable.

A step (albeit tapered) exists at a portion where the colored layers overlap, so claims 95 and 96 are also unpatentable. The organic resin film is a leveling film, as discussed above with reference to *Yoneya*, so claims 99 and 100 are also unpatentable.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Schechter whose telephone number is (571) 272-2302. The examiner can normally be reached on Monday - Friday, 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on (571) 272-1787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Andrew Schechter  
Primary Examiner  
Technology Center 2800  
29 September 2007